

Title (en)

MANUFACTURE OF THERMOELECTRIC POWER GENERATION UNIT

Title (de)

HERSTELLUNG EINER THERMOELEKTRISCHEN LEISTUNGSERZEUGUNGSEINHEIT

Title (fr)

FABRICATION D'UNE UNITE GENERATRICE D'ENERGIE THERMOELECTRIQUE

Publication

EP 0760530 A4 19970502 (EN)

Application

EP 95918194 A 19950516

Priority

- JP 9500933 W 19950516
- JP 10139294 A 19940516

Abstract (en)

[origin: US5897330A] PCT No. PCT/JP95/00933 Sec. 371 Date Nov. 14, 1996 Sec. 102(e) Date Nov. 14, 1996 PCT Filed May 16, 1995 PCT Pub. No. WO95/31832 PCT Pub. Date Nov. 23, 1995A thermoelectric power generation unit comprises a plurality of dissimilar thermoelectric structures (20, 21) laid in alternating layers. Adjacent thermoelectric bodies incorporated in each of the thermoelectric structures are connected together in series. Respective thermoelectric structures are fabricated by the steps of forming a stripe-shaped pattern on a substrate (10) using a photosensitive resin (12), forming a polymer film on the underside of the substrate, forming first thermoelectric bodies (15) and second thermoelectric bodies (17) by plating on an electrode film (11) inside openings of the photosensitive resin, coating the first thermoelectric bodies (15) and second thermoelectric bodies (17) with a thermosetting resin (16), dissolving the substrate (10) and electrode film (11) thereafter.

IPC 1-7

H01L 35/32; H01L 35/34

IPC 8 full level

H01L 35/32 (2006.01); **H01L 35/34** (2006.01)

CPC (source: EP US)

H10N 10/01 (2023.02 - EP US); **H10N 10/17** (2023.02 - EP US); **H01L 2924/0002** (2013.01 - EP US)

Citation (search report)

- [A] US 5286304 A 19940215 - MACRIS CHRIS [US], et al
- [A] US 3434203 A 19690325 - THORP WILLIAM
- [A] FR 2435132 A1 19800328 - CIT ALCATEL
- [A] PATENT ABSTRACTS OF JAPAN vol. 012, no. 308 (E - 647) 22 August 1988 (1988-08-22)
- See references of WO 9531832A1

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CN100416878C; US6511860B1; US6713833B2; WO2004105146A1

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

US 5897330 A 19990427; CN 1052345 C 20000510; CN 1148443 A 19970423; DE 69511263 D1 19990909; DE 69511263 T2 20000113; EP 0760530 A1 19970305; EP 0760530 A4 19970502; EP 0760530 B1 19990804; JP 3115605 B2 20001211; WO 9531832 A1 19951123

DOCDB simple family (application)

US 73733396 A 19961114; CN 95193087 A 19950516; DE 69511263 T 19950516; EP 95918194 A 19950516; JP 52951495 A 19950516; JP 9500933 W 19950516